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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,831	03/26/2004	Blayn W. Beenau	60655.9400	2830
66170 7590 05/15/2007 AMERICAN EXPRESS TRAVEL RELATED SERVICES CO., INC. c/o SNELL & WILMER, L.L.P. ONE ARIZONA CENTER 400 E. VAN BUREN STREET PHOENIX, AZ 85004-2202			EXAMINER CHAI, LONGBIT	
			ART UNIT 2131	PAPER NUMBER
			MAIL DATE 05/15/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/708,831		BEENAU ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Longbit Chai		2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-46 is/are rejected.
- 7) ☒ Claim(s) 2 and 19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/26/2007</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Priority***

1. Applicant's claim for benefit of Continuing Application priority date under 35 U.S.C. 120 is acknowledged.

### ***Claim Objection***

2. Claims 2 and 19 are objected because the claim language "said sensor" should be replaced with "said hand geometry scan sensor" to be consistent with other claims (e.g., claim 3 and 4) that also use "said hand geometry scan sensor" instead of "said sensor". Appropriate corrections are required.

### ***Double Patenting***

The nonstatutory provisional double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claim 1 – 8, 11 – 42 and 44 – 46 are rejected under the judicially created doctrine of obviousness-type provisional double patenting as being unpatentable over claim 1 – 8, 11 – 42 and 44 – 46 of U.S. Patent Copending Application No 10/710.327. Although the conflicting claims are not identical, they are not patentably distinct from each other because (a) the instant application is directed toward said hand geometry scan sensor and the copending application is directed toward a smart card; however, both types of media are considered and recognized as obvious and conventional types of media for communicating and (b) the instant application is directed toward a hand geometry sample and the copending application is directed toward a keystroke scan sample; however, both types of biometric identification method are considered and recognized as obvious and alternative types of authenticating for an individual. Therefore, such differences would have been well known within the skill in the art at the time of invention, especially as prior art discloses smart cards, transponders, and different biometric identifications being interchangeable, for design choice, system

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constraints, cost, convenience, and etc. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Furthermore, for the similar reasons, Examiner notes claims 1 – 8, 11 – 42 and 44 – 46 of the instant application are also provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 – 8, 11 – 41, 43 and 45 – 47 of copending Application No. 10/710,329 and 10/710,328, 10/710,311 and unpatentable over claims 1 – 8, 11 – 42 and 44 – 46 of copending Application No. 10/710,325, 10/710,324 and 10/708,832 and claims 1 – 35 of copending Application No. 10/708,837.

Additionally, for the similar reasons, Examiner notes claims 1 – 8, 11 – 42 and 44 – 46 are also rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 – 8, 11 – 41, 43 and 45 – 47 of U.S. Patent No 7,059,531 and unpatentable over claims 1 – 8, 11 – 42 and 44 – 46 of U.S. Patent No 7,121,471.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A person shall be entitled to a patent unless –

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1 – 2, 4 – 6, 8, 9, 11 – 16 and 19, 20, 22, 24 – 32 and 34 – 37, 39 – 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Catan (U.S. Patent 2002/0139839), in view of Brooks (U.S. Patent 6,507,662).

As per claim 1, 22 and 34, Catan teaches a transponder-reader transaction system (Catan: Para [0058]: MRL device T is a radio transponder which transmits data to a reader device) configured with a biometric security system (Catan: Para [0148] Last sentence: biometric identification can be used), said system comprising:

a transponder configured to communicate with a reader (Catan: Para [0058]: MRL device T is a radio transponder which transmits data to a reader device);

a reader configured to communicate with said system (Catan: Figure 1 and Para [0058]).

However, Catan does not disclose expressly a hand geometry scan sensor configured to detect a proffered hand geometry scan sample, said hand geometry scan sensor configured to communicate with said system; and a device configured to verify said proffered hand geometry scan sample to facilitate a transaction.

Brooks teaches a hand geometry scan sensor configured to detect a proffered hand geometry scan sample, said hand geometry scan sensor configured to communicate with said system (Brooks: Column 1 Line 49 – 51, Column 16 Line 46 – 51: a hand geometry scan sensor concentrating on personal hand shape and dimensions); and

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a device configured to verify said proffered hand geometry scan sample to facilitate a transaction (Brooks: Figure 1 / Element 22, Column 12 Line 49 – 52 and Column 1 Line 36).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Brooks within the system of Catan because (a) Catan teaches the transponder transaction system that can have all different options of authentication requirements such as personal identification number (PIN) or biometric signatures to authorize a transaction (Catan: Para [0058] and Para [0148] Last sentence), and (b) Brooks teaches providing alternative type of biometric personal identification that can offer more compact, moldable, flexible, economic and reliable automated biometric recognition means for individual by using a hand geometry scan samples concentrating on personal hand shape and dimensions scan for authentication of a transaction (Brooks: Column 1 Line 49 – 51 Line 31 – 36, Column 16 Line 46 – 51).

As per claim 2 and 35, Catan as modified teaches said sensor is configured to communicate with said system via at least one of a transponder, a reader, and a network (Brooks: Column 16 Line 64 – 67 and Column 19 Line 37 – 47).

As per claim 4, Catan as modified teaches said hand geometry scan sensor is configured to log at least one of a detected hand geometry scan sample, processed

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hand geometry scan sample and stored hand geometry scan sample (Brooks: Column 16 Line 46 – 51 and Column 12 Line 49 – 52).

As per claim 5, Catan as modified teaches including a database configured to store at least one data packet, wherein said data packet includes at least one of proffered and registered hand geometry scan samples, proffered and registered user information, terrorist information, and criminal information (Brooks: Column 2 Line 1 – 8 and Column 19 Line 37 – 47: transferred to a remote site and a database stored with previously enrolled / registered samples / patterns are used for verification).

As per claim 6 and 27, Catan as modified teaches said database is contained in at least one of the transponder, transponder reader, sensor, remote server, merchant server and transponder-reader system (Catan: Para [0148] Last sentence: biometric identification can be used & Brooks: Column 2 Line 1 – 8 and Column 19 Line 37 – 47: transferred to a remote site and a database stored with previously enrolled / registered samples / patterns are used for verification).

As per claim 8, 25 and 36, Catan as modified teaches said hand geometry scan sensor device is configured with at least one of an infrared optical sensor and a three-dimensional imaging system (Catan: Column 4 Line 25 – 26: a a three-dimensional imaging system).



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As per claim 9, 30 and 43, Catan as modified teaches said hand geometry scan sensor is configured to detect and verify hand geometry scan characteristics including at least one of hand shape, finger length, finger thickness, and finger curvature (Brooks: Column 1 Line 49 – 51, Column 16 Line 46 – 51: a hand geometry scan sensor concentrating on personal hand shape and dimensions).

As per claim 11, 28 and 42, Catan as modified teaches including a device configured to compare a proffered hand geometry scan sample with a stored hand geometry scan sample (Brooks: Column 2 Line 1 – 8).

As per claim 12, 29 and 46, Catan as modified teaches said device configured to compare a hand geometry scan sample is at least one of a third-party security vendor device and protocol/sequence controller (Brooks: Column 14 Line 45 – 50 and Column 11 Line 65 – 67: a sequence controller).

As per claim 13, Catan as modified teaches a stored hand geometry scan sample comprises a registered hand geometry scan sample (Brooks: Column 2 Line 1 – 8: a set of previously enrolled / registered samples / patterns are used for verification).

As per claim 14, Catan as modified teaches said registered hand geometry scan sample is associated with at least one of personal information, credit card information,

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debit card information, savings account information, and loyalty point information  
(Brooks: Column 16 Line 60 – 67: credit card).

As per claim 15, Catan as modified teaches different registered hand geometry scan samples are associated with a different one of: personal information, credit card information, debit card information, savings account information, and loyalty point information (Brooks: Column 2 Line 1 – 8, Column 21 Line 16 – 18 and Column 19 Line 37 – 47: different registered hand geometry scan samples are stored by numerous individuals, who inherently have different personal information).

As per claim 16, Catan as modified teaches a hand geometry scan sample is primarily associated with at least one of first user information, wherein said first information comprises personal information, credit card information, debit card information, savings account information, and loyalty point information, and wherein a hand geometry scan sample is secondarily associated with at least one of second user information, wherein said second information comprises personal information, credit card information, debit card information, savings account information, and loyalty point information, where second user information is different than first user information (Brooks: Column 21 Line 16 – 18, Column 2 Line 1 – 8, and Column 19 Line 37 – 47: a single frequency scan on several users generates a set of unique hand geometry scan samples from numerous individuals and each individual has its own unique user information).

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As per claim 19, Catan as modified teaches said sensor is configured to provide a notification upon detection of a sample (Brooks: Column 12 Line 52 – 54: the comparison results are displayed on the display unit).

As per claim 20, Catan as modified teaches said device configured to verify is configured to facilitate at least one of access, activation of a device, a financial transaction, and a non-financial transaction (Brooks: Column 19 Line 32 – 35).

As per claim 24, Catan as modified teaches said step of registering further includes at least one of: contacting said authorized sample receiver, proffering a hand geometry scan to said authorized sample receiver, processing said hand geometry scan to obtain a hand geometry scan sample, associating said hand geometry scan sample with user information, verifying said hand geometry scan sample, and storing said hand geometry scan sample upon verification (Brooks: Column 2 Line 1 – 8: verifying said hand geometry scan sample).

As per claim 26 and 37, Catan as modified teaches said step of proffering further includes proffering a hand geometry scan to a hand geometry scan sensor communicating with said system to initiate at least one of: storing, comparing, and verifying said hand geometry scan sample (Brooks: Column 16 Line 47 – 51).

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As per claim 31 and 41, Catan as modified teaches using said hand geometry scan sensor to detect at least one of blood flow and body heat (Brooks: Column 8 Line 35 – 36: body fluid dynamic evidently including blood flow).

As per claim 32 Catan as modified teaches said step of proffering a hand geometry scan to a hand geometry scan sensor communicating with said system to initiate verification further includes at least one of detecting, processing and storing at least one second proffered hand geometry scan sample (Brooks: Column 21 Line 7 – 15 and Column 25 Line 53 – 63: more than one samples are taken).

As per claim 39, Catan as modified teaches said step of detecting further includes logging each proffered hand geometry scan sample (Brooks: Column 26 Line 20 – 21).

As per claim 40 Catan as modified teaches said step of detecting further includes at least one of detection, processing and storing at least one second proffered hand geometry scan sample (Brooks: Column 25 Line 53 – 63: more than one samples are taken).

As per claim 44 Catan as modified teaches comparing a proffered hand geometry scan sample with a stored hand geometry scan sample includes comparing a proffered hand geometry scan sample with at least one of a biometric sample of a

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criminal, a terrorist, and a transponder user (Brooks: Column 16 Line 60 – 67: a card member).

As per claim 45 Catan as modified teaches said step of verifying includes verifying a proffered hand geometry scan sample using information contained on at least one of a local database, a remote database, and a third-party controlled database (Brooks: Column 2 Line 1 – 8 and Column 19 Line 37 – 47: transferred to a remote site and a database stored with previously enrolled / registered samples / patterns are used for verification).

5. Claims 3, 18 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Catan (U.S. Patent 2002/0139839), in view of Brooks (U.S. Patent 6,507,662), and in view of Goodman et al. (U.S. Patent 2002/0043566).

As per claim 3 and 38, Catan as modified does not disclose expressly said hand geometry scan sensor is configured to facilitate a finite number of scans.

Catan / Brooks in view of Goodman teaches said hand geometry scan sensor is configured to facilitate a finite number of scans (Goodman: Para [0029] Line 7 – 11: a predetermined number of scan is restricted).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Goodman within the system of Catan as modified because (a) Catan teaches the transponder transaction system that can have

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all different options of authentication requirements such as personal identification number (PIN) or biometric signatures to authorize a transaction (Catan: Para [0058] and Para [0148] Last sentence), and (b) Goodman teaches providing a flexible and reliable protection mechanism by deactivating the authentication instrument (e.g. the transaction card) if needed while allowing signature captures to be re-taken after a certain number of error attempts (Goodman: Para [0029] Line 7 – 11).

As per claim 18, Catan as modified does not disclose expressly said transponder is configured to deactivate upon rejection of said proffered hand geometry scan sample.

Catan / Brooks in view of Goodman teaches said transponder is configured to deactivate upon rejection of said proffered hand geometry scan sample (Goodman: Para [0029] Line 7 – 11: after a predetermined number of scan, the authentication instrument such as transaction card is deactivated – Examiner notes a transponder is another well known type of authentication instruments just like a transaction card that stores personal transaction and authentication information). See same rationale of combination applied herein as above in rejecting the claim 3.

6. Claims 7, 21, 23 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Catan (U.S. Patent 2002/0139839), in view of Brooks (U.S. Patent 6,507,662), and in view of Smithies et al. (U.S. Patent 6,091,835).

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As per claim 7, Catan as modified teaches said remote database is configured to be operated by an authorized sample receiver.

Catan / Brooks in view of Smithies teaches said remote database is configured to be operated by an authorized sample receiver (Smithies: Column 30 Line 1 – 4, Column 15 Line 52 – 56, Column 41 Line 64 – Column 42 Line 7 and Column 32 Line 42 – 60: the APC (Authentication Policy Component) of a Transcript Generator Module that receives and stores signature captures is an authorized agent).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Smithies within the system of Catan as modified because (a) Catan teaches the transponder transaction system that can have all different options of authentication requirements such as personal identification number (PIN) or biometric signatures to authorize a transaction (Catan: Para [0058] and Para [0148] Last sentence), and (b) Smithies teaches an enhanced security mechanism of personal authentications by adding more than one different options of the signatures into the authentication template such as cryptographic digital signatures, digitized handwritten signatures and biometric signatures to authenticate a particular transaction (Smithies: Figure 4c, Column 31 Line 18 – 38 and Column 33 Line 10 – 14).

As per claim 21 and 33, Catan as modified does not disclose expressly said device configured to verify is configured to facilitate the use of at least one secondary security procedure.

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Catan / Brooks in view of Smithies teaches said device configured to verify is configured to facilitate the use of at least one secondary security procedure (Smithies: Figure 4c, Column 31 Line 18 – 38 and Column 33 Line 10 – 14: adding more than one different options of the signatures into the authentication template such as cryptographic digital signatures, digitized handwritten signatures and biometric signatures). See same rationale of combination applied herein as above in rejecting the claim 7.

As per claim 23, Catan as modified does not disclose expressly registering at least one hand geometry scan sample with an authorized sample receiver.

Catan / Brooks in view of Smithies teaches registering comprising registering at least one hand geometry scan sample with an authorized sample receiver (Smithies: Column 15 Line 52 – 56, Column 41 Line 64 – Column 42 Line 7 and Column 32 Line 42 – 60: the APC (Authentication Policy Component) of a Transcript Generator Module that receives and stores signature captures is an authorized agent) & (Brooks: Column 2 Line 1 – 8: previously enrolled / register samples / patterns). See same rationale of combination applied herein as above in rejecting the claim 7.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Catan (U.S. Patent 2002/0139839), in view of Brooks (U.S. Patent 6,507,662), and in view of Black (U.S. Patent 6,307,956).



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As per claim 10, Catan as modified teaches using said hand geometry scan sensor to detect blood flow (Brooks: Column 8 Line 35 – 36: body fluid dynamic evidently including blood flow). However, Catan as modified does not disclose expressly detecting body heat.

Black teaches detecting body heat (Black: Column 19 Line 58 – 63: detecting user's finger temperature is qualified as detecting part of a user's body heat).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Black within the system of Catan as modified because (a) Catan teaches the transponder transaction system that can have all different options of authentication requirements such as personal identification number (PIN) or biometric signatures to authorize a transaction (Catan: Para [0058] and Para [0148] Last sentence), and (b) Black teaches an enhanced security mechanism for validating biometric identifications by using additional sensors including measuring the user's finger temperature in order to access an account during a transaction (Black: Column 19 Line 58 – 63).

8. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Catan (U.S. Patent 2002/0139839), in view of Brooks (U.S. Patent 6,507,662), and in view of Teicher et al. (U.S. Patent 6,257,486).

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As per claim 17, Catan as modified does not disclose expressly said transponder-reader transaction system is configured to begin mutual authentication upon verification of said proffered hand geometry scan sample.

Catan / Brooks in view of Teicher teaches said transponder-reader transaction system is configured to begin mutual authentication upon verification of said proffered hand geometry scan sample (Teicher: Column 7 Line 40 – 48: a mutual authentication is taken – Examiner notes a transponder is another well known type of authentication instruments just like a transaction card that stores personal transaction and authentication information).

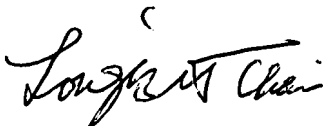
It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Teicher within the system of Catan as modified because (a) Catan teaches the transponder transaction system that can have all different options of authentication requirements such as personal identification number (PIN) or biometric signatures to authorize a transaction (Catan: Para [0058] and Para [0148] Last sentence), and (b) Teicher teaches providing an enhanced protection mechanism by employing mutual authentication techniques between the authentication instrument and the user (Teicher: Column 7 Line 40 – 48).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Longbit Chai whose telephone number is 571-272-3788. The examiner can normally be reached on Monday-Friday 9:00am-5:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Longbit Chai, Ph.D.  
Patent Examiner  
Art Unit 2131  
4/20/2007